

consideration from the Examiner to an extent that a new search need be performed. Furthermore, since the Response shows that the rejections under Section 102 and 103 are improper and the claims are in allowable form, the issues for appeal have been simplified. Accordingly, please enter the following remarks.

REMARKS

A. Finality of Office Action

The Office Action mailed on August 21, 2003 has been made Final. Applicant traverses the finality of the Office Action based on the following facts:

1) The Office Action mailed on February 3, 2003 rejected claims 1-4, 14 and 19-22 under 35 U.S.C. § 102(b) as being anticipated by Chapman et al. Claim 5 was rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. and Momose. Claims 6-9, 15-17 and 23-25 were rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. Claims 10-13 were rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. and Seely et al. Claims 1-7 were rejected under 35 U.S.C. § 102(f) because the Applicant did not invent the claimed subject matter. Claims 1-7 were rejected under 35 U.S.C. § 102(g) because they were directed to the same invention as that of claims 1-4, 7-9 and 19-22 of U.S. Patent Application Serial No. 09/797,498 ("the '498 application"). Claims 1-7 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious in view of claims 1-4, 7-9 and 19-22 of the '498 application. Claim 18 was indicated to contain allowable

subject matter.

2) Applicants filed a Response on May 5, 2003 where no claims were amended.

3) The present Office Action mailed on August 21, 2003 has rejected claims 1-5, 14 and 19-22 under 35 U.S.C. § 102(b) as being anticipated by Chapman et al. Claims 6, 7, 15-17 and 23-25 are rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. Claims 8-13 are rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. and Seely et al. Claims 1-17 and 19-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious in view of claims 1-4, 7-9 and 19-22 of the '498 application. Claim 18 was indicated to contain allowable subject matter.

A comparison between the Office Actions of February 3, 2003 and August 21, 2003 reveals that there have been changes to the rejections even though Applicants did not amend the claims in the time frame between the mailings of the two Office Actions. In particular, claim 5 is newly rejected under 35 U.S.C. § 102(b) as being anticipated by Chapman et al. Claims 8 and 9 are newly rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. and Seely et al. Claims 8-17 and 19-25 are newly provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious in view of claims 1-24 of the '498 application. No amendments to the claims of the '498 application have been made in the time frame between the Office Actions of February 3, 2003 and August 21, 2003. Since the new rejections identified in this paragraph were not necessitated by the Applicant's Response of May

5, 2003, the finality of the Office Action of August 21, 2003 is improper and should be withdrawn. MPEP § 706.07(a).

B. 35 U.S.C. § 102(b)

In the Office Action mailed on August 21, 2003, claims 1-5, 14 and 19-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chapman et al. Applicant traverses this rejection for the same reasons given in his Response of February 3, 2003, the entire contents of which are incorporated herein by reference. In particular, independent claims 1 and 19 each recites an analyzer that suppresses the intensity of a portion of a beam that is transmitted through an object. Chapman et al. does not disclose an analyzer that suppresses a portion of a beam transmitted through an object. Accordingly, claims 1 and 19 and their dependent claims 2-5, 14 and 20-22 are not anticipated by Chapman et al. and so the rejection is improper and should be withdrawn.

It is noted that the Office Action has asserted that the Bragg or Laue type crystal analyzer mentioned at column 2, line 53 have the inherent property “to suppress the refracted beams that are detected.” Applicant disagrees with this assertion. A Bragg or Laue type crystal analyzer selects particular refracted beams that are detected. Those beams striking the crystal that satisfy the Bragg condition are directed by the crystal analyzer to a detector. Those beams that do not satisfy the condition are not directed by the crystal analyzer at all. If the Office Action is treating the non-Bragg condition beams as being suppressed, then the rejection is still improper. In

particular, claim 1 recites that the detector system receives the suppressed first portion of the beam of radiation and claim 19 recites generating an image of an object based on the suppressed first portion of the beam of radiation. However, as pointed out above, there are no beams directed from a Bragg or Laue crystal analyzer that correspond to non-Bragg condition beams that impinge on the crystal analyzer. If there are no beams directed from the Bragg or Laue crystal analyzers, then it follows that there can be no beams to be received by a detector system or used for generating an image as recited in claims 1 and 19. Accordingly, the Bragg or Laue type crystal analyzer mentioned in Chapman et al. does not render claims 1 and 19 anticipated.

Besides not being anticipated by Chapman et al., the claims are not rendered obvious by Chapman et al. As disclosed in Chapman et al., an absorption image I_A is determined (Col. 9, l. 65 – Col. 10, l. 10) and used to derive four beam images (Col. 10, ll. 11-55). Obviously, suppression of the absorption image I_A would degrade the results for the four beam images mentioned previously. Since there is no motivation to degrade the four beam images, there is no motivation in Chapman et al. to use an analyzer that suppresses the intensity of a portion of a beam that is transmitted through an object. Thus, the claims are patentable over Chapman et al.

C. 35 U.S.C. § 103

1. Chapman et al.

Claims 6, 7, 15-17 and 23-25 were rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. Applicants traverse this rejection. As pointed out above in Section B,

Chapman et al. does not suggest using an analyzer that suppresses a portion of a beam transmitted through an object as recited in independent claims 1 and 19. Without such suggestion, the rejection is improper and should be withdrawn.

2. Chapman et al. and Seely et al.

Claims 8-13 were rejected under 35 U.S.C. § 103 as being obvious in view of Chapman et al. and Seely et al. Applicants traverse this rejection. As pointed out above in Section B, Chapman et al. does not disclose an analyzer that suppresses a portion of a beam transmitted through an object as recited in independent claim 1. Seely et al. also does not suggest using an analyzer in Chapman et al. that suppresses a portion of a beam transmitted through an object. Without such suggestion, the rejection is improper and should be withdrawn.

D. Obviousness-Type Double Patenting

Claims 1-17 and 19-25 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious in view of claims 1-24 of the '498 application. Applicant traverses this rejection to the extent that it is premature at this stage since the claims of the present application and the claims of the '498 application may be changed in the future rendering the rejection moot. When claims 1-17 and 19-25 of the present application are deemed allowable and the only issue remaining is obviousness-type double patenting with regards to the '498 application, then Applicant will fully address this issue.

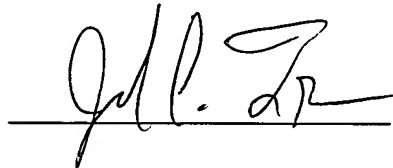
E. Claim 18

Applicant notes with appreciation that claim 18 has been indicated to contain allowable subject matter. Note that Applicant traverses the reasons of allowability regarding claims 18 in that that there are broader and/or other reasons why the claim is allowable.

CONCLUSION

In view of the arguments above, Applicant respectfully submit that all of the pending claims 1-25 are in condition for allowance and seeks an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, she is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J.C. Freeman", is written over a horizontal line.

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